

## GROUT CLEANING DEVICE

### CROSS-REFERENCE TO RELATED APPLICATION

5           This application claims the benefit of priority of U.S. provisional application number 61/889,003, filed October 9, 2013, the contents of which are herein incorporated by reference.

### BACKGROUND OF THE INVENTION

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The present invention relates to grout tools and, more particularly, to a tool used for removing dirt, grease, grime and stains from grout lines while the person using the tool is standing up.

15           Grout in between tiles is made from finely ground cement. It is very porous. Sweeping, mopping or wiping over or across the grout lines causes dirt, grease, grime and even cleaning chemicals to stick in the pores of the grout lines. It is almost impossible to remove the imbedded dirt and grime. The more the tile floor, walls or counter is cleaned, the dirtier it gets as more grime is pushed in and across the grout lines.

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Traditionally, the homeowner or business owner is on their hands and knees with a toothbrush and bucket of mop water. They scrub for hours with little results. Current grout tools are designed to remove grout prior to re-grouting or replacing tiles and cut too deep into grout lines often scratching or chipping the edges of tiles. While working on a floor, they are designed to be used in a bending  
25           down or kneeling position. Diamond grinding wheels cut deep into grout lines and chip or cut tile edges. Hand held grinding tools have very coarse grit, cut too deeply into the grout and also scratch or chip tile edges.

As can be seen, there is a need for a tool that can quickly and easily clean grout lines.

## SUMMARY OF THE INVENTION

In one aspect of the present invention, a grout cleaning tool comprises: a  
5 bracket head comprising a bottom surface; a file sized to fit within a grout of a tiled  
floor, wherein the file is mounted to the bottom surface of the bracket head; and an  
elongated handle attached to the bracket head and extending away from the  
bottom surface.

These and other features, aspects and advantages of the present  
10 invention will become better understood with reference to the following drawings,  
description and claims.

## BRIEF DESCRIPTION OF THE DRAWINGS

15 Fig. 1 is a perspective view of the present invention shown in use;  
Fig. 2 is a section detail view of the present invention along line 2-2 in  
Fig. 1;  
Fig. 3 is a section detail prior art view demonstrating post effect;  
Fig. 4 is a perspective view of the present invention shown in contracted  
20 state;  
Fig. 5 is a perspective view of the present invention shown in extended  
state;  
Fig. 6 is an exploded view of the present invention demonstrating  
alternate configuration; and  
25 Fig. 7 is an exploded view of the present invention omitting the telescopic  
upper components.

## DETAILED DESCRIPTION OF THE INVENTION

The following detailed description is of the best currently contemplated modes of carrying out exemplary embodiments of the invention. The description is not to be taken in a limiting sense, but is made merely for the purpose of illustrating the general principles of the invention, since the scope of the invention is best defined by the appended claims.

5 Broadly, an embodiment of the present invention provides a dirty grout removal tool that fits neatly in the grout line. As the tool is pushed or pulled across the grout line, a fine top layer of grout is ground or filed off, taking the dirt, grease and grime with it, leaving a new, clean grout surface. The tool can be used by homeowners and professional tile floor cleaners. The present invention may be used while standing up, lightly filing down the grout surface, leaving a clean, and fresh looking grout line. The dirty grout removal tool lightly and evenly files down just the surface of the grout lines, removing the dirty or stained grout. The present invention may be used while standing up, but the long handle can be removed while working on counter tops or walls.

15 Referring to Figures 1 through 7, the present invention includes a grout cleaning tool 10. The grout cleaning tool 10 includes a bracket head 24 having a bottom surface. The present invention further includes a file 34 sized to fit within a grout 44 of a tiled floor 42. The file 34 is mounted to the bottom surface of the bracket head 24. The present invention may further include an elongated handle attached to the bracket head 24 and extending away from the bottom surface. The elongated handle is sized so that the grout cleaning tool 10 is used in a standing position by a user 46. For example, the elongated handle may be from about 3 feet in length up to around 6 feet in length.

25 In certain embodiments, the bottom surface of the bracket head 24 may form a channel 30 along its entire length. The channel 30 can take various shapes, such as rounded, square, V-shaped, or the like. The file 34 of the present invention may be long and narrow and may thereby fit within the channel 30. The file 34 may be substantially parallel with the channel 30. The file 34 of the present

invention may include at least a diamond coating. However, the file 34 may utilize other materials to clean the grout 44. The file 34 may be at least partially cylindrical, such as entirely cylindrical. The file 34 may be attached within the channel 30 by a retaining screw. The screw may fit through an aligning file aperture 38 and channel aperture 28.

The elongated handle of the present invention may be pivotally attached to the bracket head 24. This allows for the bracket head 24 to rock back and forth, while the file 34 is resting within the grout 44. The rocking capability allows any height of a user 46 to use the grout cleaning tool 10 while standing in one place, while the present invention is being pushed or pulled along the grout 44. In such embodiments, a U-shaped hook 22 may extend from the end of the elongated handle. The end of the U-shaped hook 22 may be substantially perpendicular with the file 34. The bracket head 24 may include a bracket head opening 26 sized to receive the end of the U-shaped hook 22. The U-shaped hook 22 may include cotter pin holes 40 sized to receive cotter pins 32 on either side of the bracket head 24, thereby pivotally connecting the hook 22 to the bracket head 24.

In certain embodiments, the elongated handle may include an upper portion 12 and a lower portion 20. The upper portion 12 and the lower portion 20 may removably attach to one another. Therefore, a user 46 may detach the lower portion 20 of the elongated handle to use for tile walls and counters. In such embodiments, the lower portion 20 may include a female threaded receiver and the upper portion 12 may include a male thread 18 sized to fit within and secure the female threaded receiver.

The elongated handle of the present invention may also be telescopic. For example, the upper portion 12 may include an outer tube and an inner tube 16. The outer tube and inner tube 16 may telescope relative to one another and lock into a position. Therefore, the elongated handle may adjust in length to accommodate different sized users 46. The elongated handle may further include

a rubber grip 14 so that a user may easily grasp and secure the grout cleaning tool during use.

5 A method of using the present invention may include the following. A user can grasp hold of the grip 14 and place the parallel file 34 in the grout line 44 while standing up. With a push pull action, the parallel file 34 can be moved forward and backward in the grout line 44 while the base piece rocks slightly (flexes), adjusting to the movement and height of person 46 while lightly filing down the grout surface. In this manner, a person can continue forward or backward for the distance of the grout line 44 without having to stop or remove the tool from the grout line 44. A dirty layer of grout 48 may be removed from the grout line 44 by using the present invention. While the above describes cleaning grout 44, many times after tile has been laid and the grout put in between, the grout lines 44 aren't even in depth. The tool of the present invention could be used to even out the grout lines 44 and make them the same depth.

15 It should be understood, of course, that the foregoing relates to exemplary embodiments of the invention and that modifications may be made without departing from the spirit and scope of the invention as set forth in the following claims.

What is claimed is:

1. A grout cleaning tool comprising:
  - a bracket head comprising a bottom surface;
  - 5 a file sized to fit within a grout of a tiled floor, wherein the file is mounted to the bottom surface of the bracket head; and
  - an elongated handle attached to the bracket head and extending away from the bottom surface.
- 10 2. The grout cleaning tool of claim 1, wherein the file is at least partially cylindrical and substantially parallel with the bottom surface.
3. The grout cleaning tool of claim 1, wherein the bracket head forms a channel on the bottom surface sized to secure the file within.
- 15 4. The grout cleaning tool of claim 1, wherein the elongated handle is pivotally attached to the bracket head.
5. The grout cleaning tool of claim 4, wherein the elongated handle comprises
  - 20 a U-shaped hook comprising an end substantially perpendicular with the file, wherein the bracket head comprises an opening sized to receive the end, and thereby pivotally attach the elongated handle and the bracket head.
- 25 6. The grout cleaning tool of claim 1, wherein the file comprises at least a diamond coating.

7. The grout cleaning tool of claim 1, wherein the elongated handle is telescopic, and thereby adjustable in length.
- 5 8. The grout cleaning tool of claim 1, wherein the elongated handle comprises an upper portion and a lower portion, wherein the upper portion and the lower portion are removably attachable.
- 10 9. The grout cleaning tool of claim 8, wherein the lower portion comprises a female thread and the upper portion comprises a male thread sized to fit within and secure to the female thread.
- 15 10. The grout cleaning tool of claim 1, wherein the elongated handle is sized so that the grout cleaning tool is used in a standing position.

ABSTRACT OF THE DISCLOSURE

5 A grout cleaning tool is provided. The grout cleaning tool includes a  
bracket head having a bottom surface. The present invention further includes a  
file sized to fit within a grout line of a tiled floor. The file is mounted to the bottom  
surface of the bracket head. The present invention may further include an  
elongated handle attached to the bracket head and extending away from the  
bottom surface. The elongated handle is sized so that the grout cleaning tool is  
10 used in a standing position by a user.